Amendments to the Claims

1. (currently amended) A control program embodied on a computer readable medium for controlling an operation of a microprocessor, the control program comprising a concealed program recoverable by a data scramble circuit and a non-concealed program,

wherein the data scramble circuit is a single hardware circuit and at least a portion of the data scramble circuit is operative to perform both a data scramble function and an error correction function, and

wherein a recovered program from the concealed program includes:

at least a public function which is to be called from outside of the recovered program by the microprocessor and an internal function which is to be called from inside of the recovered program; and

a relative address list indicating a relative address of the at least one public function in the recovered program, wherein the relative address list is provided at a prescribed location in the recovered program.

2. (canceled)

3. (currently amended) A device, comprising:

a microprocessor;

a program memory for storing a control program for controlling an operation of the microprocessor, the control program including a concealed program and a non-concealed program;

a rewritable memory for storing a copy of the concealed program copied from the concealed program stored in the program memory; and

a data scramble circuit for recovering the concealed program stored in the rewritable memory as a recovered program, wherein the data scramble circuit is a

single hardware circuit and at least a portion of the data scramble circuit is operative to perform both a data scramble function and an error correction function, and

wherein the recovered program includes:

at least a public function which is to be called from outside of the recovered program by the microprocessor and an internal function which is to be called from inside of the recovered program; and

a relative address list indicating a relative address of the at least one public function in the recovered program, wherein the relative address list is provided at a prescribed location in the recovered program.

4. (canceled)

5. (canceled)

6. (currently amended) A method for creating a control program, comprising:

a program descramble step of descrambling a portion of a control program by reverse scramble of a data scramble circuit in a device to be controlled, thereby creating a concealed program as a portion of the control program; and

a program storing step of storing the control program including the concealed program in a program memory so that the control program controls an operation of a microprocessor in the device to be controlled, wherein the data scramble circuit is a single hardware circuit and at least a portion of the data scramble circuit is operative to perform both a data scramble function and an error correction function, and

wherein a recovered program from the concealed program includes:

at least a public function which is to be called from outside of the recovered program by the microprocessor and an internal function which is to be called from inside of the recovered program; and

a relative address list indicating a relative address of the at least one public function in the recovered program, wherein the relative address list is provided at a prescribed location in the recovered program.

7. (original) A method for creating a control program according to claim 6, wherein the program descramble step includes the steps of:

creating a non-concealed program; and

synthesizing the concealed program and the non-concealed program into the control program.

8. (currently amended) A method for operating a control program, comprising:

a program copying step of copying a concealed program which is a portion of the control program from a program memory into a rewritable memory;

a program recovery step of recovering the concealed program copied by the program copying step as a recovered program by a data scramble circuit; and

a program execution step of executing a non-concealed program included in the control program and the recovered program, wherein the data scramble circuit is a single hardware circuit and at least a portion of the data scramble circuit is operative to perform both a data scramble function and an error correction function, and

wherein a recovered program includes:

at least a public function which is to be called from outside of the recovered program by the microprocessor and an internal function which is to be called from inside of the recovered program; and

a relative address list indicating a relative address of the at least one public function in the recovered program, wherein the relative address list is provided at a prescribed location in the recovered program.

9. (original) A method for operating a control program according to claim 8, further comprising a program erasure step of erasing the recovered program from the rewritable memory.